

1. A method of providing one of a plurality of schedulers for a multitasking system for a processor, comprising:

choosing a particular one of the schedulers;

setting a program counter to an address corresponding to code of the particular one of the schedulers; and

the processor executing code at an address corresponding to the program counter.

2. A method, according to claim 1, further comprising:

setting a stack pointer to an address corresponding to stack space for the particular one of the schedulers; and

the processor using the stack space at the stack pointer after executing code at the address corresponding to the program counter.

3. A method, according to claim 1, wherein all of the schedulers use the same stack.

4. A method, according to claim 1, wherein choosing a particular one of the schedulers is based on parameters that vary according to run time conditions.

5. A method, according to claim 4, wherein at least one of the schedulers is for statistical code profiling.

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6. A method, according to claim 4, wherein a first one of the schedulers is for start up conditions and a second one of the schedulers is for steady state operation.

7. A method, according to claim 1, wherein swapping in one of the plurality of schedulers is performed by setting up a return from an exception that causes the one scheduler to execute.

8. A method, according to claim 1, wherein setting a program counter includes modifying a variable that is modified according to the particular one of the schedulers that is chosen.

9. A method of scheduling tasks in a multitasking operating system, comprising:

choosing a particular one of a plurality of schedulers; and

running the particular scheduler to schedule tasks.

10. A method, according to claim 9, wherein choosing a particular one of the plurality of schedulers is performed by setting up a return from an exception that causes that causes the one scheduler to execute.

11. A method, according to claim 9, wherein running the particular one of the schedulers includes setting a program counter to an address corresponding to code of the particular one of the schedulers.

12. A method, according to claim 11, wherein setting a program counter includes modifying a variable that is modified according to the particular one of the schedulers that is chosen.

setting a stack pointer to an address corresponding to stack space for the particular one of the schedulers; and

14. A method, according to claim 9, wherein all of the schedulers use the same stack.

16. A method, according to claim 15, wherein at least one of the schedulers is for statistical code profiling.

17. A method, according to claim 15, wherein a first one of the schedulers is for start up conditions and a second one of the schedulers is for steady state operation.